

BEFORE THE  
ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	:	
	:	
Petition for approval of tariffs implementing	:	Docket No. 06-0411
ComEd's proposed residential rate	:	
stabilization program	:	

Direct Testimony of  
**Scott J. Rubin**

on Behalf of

People of the State of Illinois

July 11, 2006

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## 1. Introduction

**Q. Please state your name and business address.**

A. My name is Scott J. Rubin. My business address is 3 Lost Creek Drive, Selinsgrove, PA.

**Q. By whom are you employed and in what capacity?**

A. I am an independent consultant and an attorney. My practice is limited to matters affecting the public utility industry.

**Q. What is the purpose of your testimony in this case?**

A. I have been asked by the Office of Attorney General (AG) to review the Residential Rate Stabilization (RRS) plan filed by Commonwealth Edison Company (ComEd) and determine its impact on residential customers.

**Q. What are your qualifications to provide this testimony in this case?**

A. I have testified as an expert witness before utility commissions or courts in the District of Columbia and in the states of Arizona, Delaware, Kentucky, Illinois, Maine, Maryland, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. I also have testified as an expert witness before two committees of the U.S. House of Representatives and one committee of the Pennsylvania House of Representatives. I also have served as a consultant to the staffs of two state utility commissions, several national utility trade associations, and state and local governments throughout the country. Prior to establishing my own consulting and law practice, I was employed by the Pennsylvania Office of Consumer Advocate from 1983 through January 1994 in increasingly responsible positions. From 1990 until I left that Office, I was one of two senior attorneys in that Office. Among my other responsibilities in that position, I had a major role in

23 setting their policy positions on water and electric matters. In addition, I was responsible  
24 for supervising the technical staff of that Office. I also testified as an expert witness for  
25 that Office on rate design and cost of service issues.

26 Throughout my career, I developed substantial expertise in matters relating to the  
27 economic regulation of public utilities. I have published articles, contributed to books,  
28 written speeches, and delivered numerous presentations, on both the national and state  
29 level, relating to regulatory issues. I have attended numerous continuing education  
30 courses involving the utility industry. I also periodically participate as a faculty member  
31 in utility-related educational programs for the Institute for Public Utilities at Michigan  
32 State University, the American Water Works Association, and the Pennsylvania Bar  
33 Institute. Appendix A to this testimony is my curriculum vitae.

34 **Q. Do you have any experience that is particularly relevant to the issues in this case?**

35 A. Yes, I do. I was an expert witness on residential rate design and cost of service issues for  
36 the AG in ComEd's recent DST case (Docket No. 05-0597), so I am very familiar with  
37 ComEd's residential rates and related rate design issues. In addition, during my career I  
38 have reviewed and evaluated several utility phase-in programs, so I am familiar with the  
39 mechanics of a phase-in mechanism like the proposed RRS plan.

40 **Q. Please describe your understanding of the proposed RRS plan.**

41 A. ComEd's proposed RRS plan is a phase-in plan like those that were sometimes used in  
42 states that allow deferrals, during the 1980's and 1990's when new generating plants  
43 were coming on line. Rates are kept artificially low in the early years of the plan, with  
44 the difference being deferred and recovered with interest in the later years of the plan. In

this case, ComEd is proposing to defer a portion of its power supply costs for default service customers for between two and three years, and recover those deferred costs during a portion of the third year and the following three years (years 4 through 6).

**Q. What have you reviewed in preparing your testimony in this case?**

A. I reviewed ComEd's RRS filing, including the testimony, proposed tariff, and schedules estimating the effect of the RRS plan. In addition, through discovery we obtained the spreadsheet model that ComEd used to prepare ComEd Exhibit 2.3. In the very limited amount of time available, I was able to evaluate a few scenarios using that spreadsheet model.

## 2. Summary

**Q. Please summarize your major conclusions.**

A. I conclude that ComEd's proposed RRS plan does not provide a significant benefit to residential customers. In fact, the primary beneficiary of the plan appears to be ComEd because ComEd would earn so-called carrying charges well in excess of \$100 million dollars during the six-year RRS period, and those charges would be paid by residential customers. This has the effect of pushing rates higher than they would be without RRS.

I summarize my conclusions in AG Exhibit 1.1. As summarized in that exhibit, and described in more detail later in this testimony, I find the following:

- ComEd would be likely to recover between \$160 million and \$210 million in carrying charges under the RRS plan – revenues that it would not receive without RRS.
- Rates for all residential customers will be higher with RRS than they would be without RRS for at least four of the six years (2007-2012). With wholesale power prices in the range of \$60 to \$80 per MWH, the

combined rate increase from 2006 through 2010 for non-heating customers would range between 18% and 42% without RRS and between 25% and 51% with RRS.

- Residential space-heating customers would end up paying rates that are significantly higher with RRS than they would pay without RRS. From 2007 through 2010, heating customers would face combined increases ranging between 59% and 94% without RRS, but between 69% and 106% with RRS. Further, under many scenarios, heating customers would face double-digit rate increases in every year from 2007 through 2010 under the RRS.

- RRS would create serious inequity. A new customer would be required to pay costs that were incurred to provide service when s/he was not a customer. This increased annual cost for a new non-heating customer (e.g., one who moves into ComEd's service area in 2010) ranges between \$69 and \$86 per year. For a new heating customer the increase is between \$148 and \$186 per year. Having new customers pay some of the deferred costs reduces rates for existing customers. This has the effect of allowing existing customers to avoid paying some of the costs incurred to serve them.

### 3. Concerns with ComEd's Spreadsheet Model of RRS

**Q. Does ComEd's spreadsheet model enable you to evaluate a full range of scenarios over the six-year period contemplated for the RRS plan?**

**A.** No, it does not. ComEd's model will not accept energy prices in excess of \$80 per MWH, so it is not possible to evaluate scenarios that have prices exceeding that level during the six-year period. Further, the model we were given is password protected, so it is not possible to make any changes to the model other than for a few assumptions that ComEd has allowed to be changed. Protecting the model also makes it all but impossible to evaluate the logic of the model to determine whether it is properly evaluating changes in various inputs.

98 **Q. Do you have specific concerns with ComEd's model?**

99 A. Yes, as provided, ComEd's model does not enable me to change more than a few  
100 assumptions. For example, it is not possible to model the effect of the Administrative  
101 Law Judges' proposed order in ComEd's on-going DST case. Similarly, it will not be  
102 possible for someone other than the Company to modify the model to reflect the  
103 Commission's final order in that case. Some of the conclusions in that proposed order  
104 could have a significant impact on the model's results, such as having different  
105 distribution charges for heating and non-heating customers, and having different  
106 customer charges for single-family and multi-family customers.

107 **Q. Does ComEd's RRS model distinguish between heating and non-heating customers?**

108 A. Yes, it does, but the distinction is limited to supply charges. The model is set up for all  
109 residential customers to pay the same customer and distribution charges.

110 **Q. Does ComEd's RRS model distinguish between single-family and multi-family**  
111 **customers?**

112 A. No, it does not.

113 **Q. What do these limitations mean?**

114 A. These limitations mean that I cannot offer an opinion on whether ComEd's spreadsheet is  
115 accurately modeling the effect of various assumptions on the level of residential rates that  
116 would result from its proposed RRS plan. It also means that I cannot evaluate the  
117 impacts on residential customers from rate design changes that have been proposed in  
118 ComEd's DST case. If some of those changes are adopted by the Commission, then

ComEd's model would not be able to accurately reflect the true impact of the RRS plan on residential customers.

**Q. Given those limitations, what analytic approach will you use?**

A. Given the limitations of ComEd's model and the very short amount of time the procedural schedule provides (which is not sufficient to construct and test an independent model), I discuss general concerns with ComEd's proposal. I also evaluate whether those concerns change significantly under a limited range of wholesale pricing scenarios.

#### **4. Concerns with ComEd's Proposed RRS Plan**

**Q. What are your overall concerns with ComEd's proposed RRS plan?**

A. I have three over-riding concerns with ComEd's proposal. First, and by far most importantly, it is my opinion that the RRS plan does not provide a significant benefit to residential customers. In fact, the primary beneficiary of the plan appears to be ComEd because ComEd would earn so-called carrying charges well in excess of \$100 million dollars during the six-year RRS period, and those charges would be paid by residential customers. This has the effect of pushing rates higher than they would be without RRS.

Second, ComEd has not accurately described the effects of its proposal on residential heating customers. Under ComEd's proposal, heating customers' bills will increase by 70% or more under RRS – increases that are at least 10 percentage points higher than they would be without RRS.

Third, the proposed RRS would require new customers to pay for costs deferred from prior periods when they were not customers. Requiring a new customer to pay expenses associated with periods when s/he was not a customer is grossly unfair. This

fails one of the traditional regulatory tests of the justness and reasonableness of rates, known as “intergenerational equity.”

**A. RRS Provides a Substantial Benefit to ComEd**

**Q. Under the example provided in ComEd Exhibit 2.3, how much would ComEd incur for power supply costs and how much would it recover from customers?**

A. ComEd Exhibit 2.3 is based on an example with a wholesale power cost of \$60 per MWH in each year from 2007 through 2012, as well as assumptions about growth in residential consumption (1% per year), growth in number of residential customers (1% per year), and the weighted cost of capital (8.94%). I will refer to this set of assumptions as Case 1. Under Case 1, in 2007 ComEd would incur \$1,967 million in residential power supply costs and it would recover \$1,631 million in supply-related revenues from residential customers. The difference, \$346 million, would be deferred with interest for recovery in later years.

AG Exhibit 1.2, shows the difference between ComEd’s residential power supply costs and revenues over the six-year life of the proposed RRS. The exhibit shows that ComEd would under-recover its costs during the first two years, recover slightly more than its costs in 2009, and recover significantly more than its costs in 2010 through 2012.

If we add up the total costs and revenues on this exhibit, it shows that ComEd would incur power supply costs of \$12,103 million during these six years, but it would recover \$12,276 million from customers. That is, ComEd would recover approximately \$173 million more than its power supply costs from residential customers.



I illustrate this difference on AG Exhibit 1.3. This exhibit graphically illustrates the difference between ComEd's power supply costs and revenues under the proposed RRS plan. If the costs and revenues over the six-year period were equal, the areas between the cost and revenue curves would be equal. In fact, though, they are not equal. ComEd will be deferring \$478.5 million in supply costs during 2007 and 2008, but it will recover \$651.7 million above its costs during 2009 through 2012. The difference of \$173.2 million represents the carrying charges that ComEd would collect on the deferred amounts.

In other words, ComEd's proposal does not just result in ComEd shifting costs from one year to another, which in itself would be problematic because it creates inequities between different generations of customers (see below). ComEd's plan goes further and would permit ComEd to recover approximately 36% more than the costs it actually deferred.

**Q. Did you analyze other scenarios to determine what would happen to ComEd's deferrals using different assumptions?**

A. Yes, I did. I analyzed seven scenarios, including the Company's \$60/MWH scenario (Case 1). I briefly describe the scenarios on AG Exhibit 1.4. For purposes of determining the effect on deferrals and cost recovery, scenarios 6 and 7 are the same as scenarios 1 and 2, respectively, so I will not discuss those scenarios until I look at the impacts on customers' rates.

Cases 1 through 5 look at a range of wholesale power prices between \$60 and \$80 per MWH. I would have liked to evaluate the impact of even higher power prices,

but as I mentioned above, ComEd's model does not accommodate prices in excess of \$80 per MWH. I selected prices in this range because it appears likely that, if ComEd is permitted to conduct its reverse auction, wholesale prices will be within or above this range. I note that on June 6, 2006, the auction manager announced that opening prices in the reverse auction will be in the range of \$75 to \$104 per MWH. Given that information, as well as my understanding of current power prices within PJM, it appears likely that the winning bids will fall within or above the range of \$60 to \$80 per MWH.

**Q. What does your analysis show?**

A. AG Exhibit 1.5 summarizes the results of the five scenarios. Within this range, the overall effect and structure of the RRS plan remain fairly consistent. In the first year, ComEd would defer about 16% to 17% of its power supply costs from customers. In the second year rates would increase so that ComEd would defer about 7% of its supply costs. In the third year, rates would increase again so that ComEd would begin recovering the deferrals, with rates in that year exceeding supply costs by about 1.5%. Then rates go up for a fourth time in 2010 to a level that is about 9% or 10% more than ComEd's costs, and rates remain at this level through 2012.

The effect of this pattern is that ComEd would recover between \$173 million and \$209 million in carrying charges over the six-year period. This represents the amount collected by ComEd in excess of its power supply costs during this period.

**Q. Did you evaluate a scenario without the recovery of carrying charges?**

A. No, I did not. Mr. Mitchell states that ComEd "must be allowed to recover its cost of capital related to the expenses that are deferred." ComEd Ex. 1.0, 7:128-130. Later in

206 his testimony, he essentially withdraws the RRS proposal if it does not include the  
207 recovery of carrying charges. ComEd Ex. 1.0, pp. 9-10.

208 **Q. What would happen to the level of carrying charges if the Commission adopts the**  
209 **cost of capital findings in the ALJs' proposed order from ComEd's DST case?**

210 A. The ALJs in the ComEd DST case adopted a weighted cost of capital equal to 8.20%. If  
211 this figure is used instead of the 8.94% that ComEd uses, the recovery of carrying  
212 charges under Case 1 declines by \$15.9 million to \$157.3 million, as I show on AG  
213 Exhibit 1.6.

214 ***B. RRS Results in Substantially Higher Rates for Residential Customers***

215 **Q. Did you evaluate the impact of ComEd's RRS proposal on residential rates?**

216 A. Yes, I did.

217 **Q. Are the rate impacts of the RRS plan roughly the same for all residential**  
218 **customers?**

219 A. No, the rate impacts of the RRS plan are dramatically different for space-heating  
220 customers than they are for non-heating customers. In this respect, I find ComEd's  
221 presentation to be very misleading. For example, Mr. Mitchell testifies that the average  
222 residential increases would be 8%, 7%, and 6% in 2007 through 2009. ComEd Ex. 1.0,  
223 4:74-76. That may be true for the residential class as a whole under Case 1 (the \$60 per  
224 MWH scenario), but for heating customers the rate increases are significantly higher.

225 I analyzed the average residential rates that would result, with and without RRS,  
226 under each of the 7 scenarios that I described earlier and I show the results in AG Exhibit

1.7. The first page of the exhibit (Table 1) shows the results for non-heating customers and the second page (Table 2) shows the results for heating customers.

**Q. Please discuss the results for non-heating customers under Case 1, which is the scenario ComEd presents in its Exhibit 2.3.**

A. Under the \$60 per MWH scenario, with everything as ComEd presents it, non-heating customers would have an average increase of 19.9% in 2007 without RRS, with slight decreases in 2008 through 2010.<sup>1</sup> The combined increase over these four years would be approximately 18%.

With RRS, non-heating customers would see average increases ranging between 5% and 7% in each year from 2007 through 2010. The combined increase over these four years under RRS would be approximately 25%.

**Q. Please discuss the results for heating customers under Case 1.**

A. First, I should note that Case 1 includes the Commission's "mitigation plan," but does not include the ALJs' recommendation of a lower distribution charge for heating customers. In any event, without RRS heating customers would see increases of 23.1%, 7.1%, 14.6%, and 5.3% in 2007 through 2010, respectively. This is a combined rate increase of approximately 59%. In contrast, under RRS heating customers would face increases of 9.9%, 14.6%, 21.1%, and 10.9% in 2007 through 2010, respectively. This represents a combined rate increase of approximately 69%. That is, under RRS heating customers would face double-digit rate increases every year from 2007 through 2010. And the

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<sup>1</sup> The slight decreases in non-heating rates in 2008-2010 are the result of applying the "mitigation plan" adopted by the Commission in ComEd's procurement case.

combined increases for heating customers under RRS would result in an overall rate increase more than 10 percentage points higher than would be the case without RRS.

Further, the so-called mitigating effects of RRS would be virtually non-existent for heating customers; it would simply change the timing of very large increases. Thus, without RRS, heating customers would see increases of 23% and 14% in 2007 and 2009. With RRS, they would see increases of 21% and 14% in 2009 and 2008.

**Q. Have you prepared graphs to illustrate these impacts on residential customers?**

A. Yes, I have. AG Exhibit 1.8 shows two graphs – one for non-heating customers and one for heating customers. Each graph shows the average rate per KWH that would be implemented without RRS (the bar) and the average rate with RRS (the line) under Case 1. These charts show that whatever benefit may exist from RRS would be relatively small and very short lived, while the detriment – higher rates than would be in place otherwise – lasts for at least four years.

**Q. You have focused on the results under Case 1. Do the other scenarios show similar results?**

A. Yes, the results of Cases 2 through 7 are similar to what I described for Case 1 except, of course, that the rates are higher than Case 1 in every other scenario. Thus, under a reasonable range of assumptions, by 2010 both heating and non-heating customers would be paying significantly higher overall rates under RRS than they would pay without RRS.

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**C. RRS Requires New Customers to Pay Costs Incurred to Serve Existing Customers**

**Q. Would new customers be required to pay some of the deferred costs?**

A. Yes, they would. Under the proposed RRS plan, customers who come on the system in 2009 through 2012 would be required to pay rates that include the recovery of power supply expenses deferred during 2007 and 2008, plus carrying charges. These deferred costs were incurred solely to serve ComEd customers during 2007 and 2008; they do not provide any benefit whatsoever to future customers.

**Q. In your opinion, is it reasonable to require future customers to pay expenses associated with serving customers in prior periods?**

A. No, it is not. In my opinion, it is patently unjust and unreasonable to require a new customer to pay expenses that were incurred to provide service before s/he came on the system.

In my opinion, the deferral of purchased power expense is not even a close call. In the 1980's and 1990's, some jurisdictions allowed phase-in plans to smooth out the revenue stream from placing a new power plant into service. While I understand that the Illinois Supreme Court did not permit such plans, it was at least reasonable to consider how the capital-related costs of a long-lived asset like a power plant should be recovered from customers over the many years the plant would be in service.

But the deferral of costs for buying power to serve customers right now is an entirely different matter. There is no reasonable justification for requiring future customers to pay out-of-pocket expenses that are incurred to serve an earlier generation of customers.

Purchased power expenses are incurred hour by hour solely to serve the demand for electricity at the instant the power is purchased. Electricity cannot be stored for future use and cannot be considered an “investment” in serving future customers. I cannot conceive of any way in which power purchased and used during 2007 benefits a new customer in 2010.

If the Illinois courts found that a power plant phase-in impermissibly shifted costs between generations of customers, then I cannot see how a deferral of purchased power costs would pass muster. Indeed, even in jurisdictions that permitted power plant phase-ins, I do not believe that purchased power deferrals would be proper.

**Q. Is the phase-in of purchased power costs consistent with established regulatory principles?**

A. No, definitely not. There are three important, and related, regulatory principles that apply to this situation. They fall under the general category of what is usually termed “intergenerational equity” – that is, whether regulatory policies treat different generations of customers fairly. Related to this overall policy are two other principles: the prohibition against retroactive ratemaking and the matching principle. These are, in effect, ways to evaluate intergenerational equity.

The prohibition against retroactive ratemaking generally prevents utilities from recovering costs associated with service that was provided in the past. There are some exceptions to this prohibition, particularly for expenses that are incurred regularly but at long intervals (such as the painting of a water tank). But generally, this principle requires

rates to be established so that customers pay the current cost of serving them; not costs associated with service that was provided in the past.

The matching principle is familiar to everyone who has been involved in a rate case and is based on the same underlying need to preserve intergenerational equity. The matching principle requires that rates be established based on a common set of assumptions during a common time period. Revenues, expenses, and investment must remain synchronized, so that rates are calculated fairly. Thus, for example, it would be unreasonable to require a utility to recognize revenues it will receive from new customers, but not enable it to recover the costs of serving those new customers. Similarly, it would be unreasonable to allow a utility to recover the costs of a new facility that will reduce expenses without also recognizing the lower level of expenses.

**Q. Is ComEd's proposed RRS plan consistent with the prohibition against retroactive ratemaking and the matching principle?**

A. No, it is not. ComEd's proposed RRS plan could be the textbook example of impermissible retroactive ratemaking, and it also violates the matching principle. RRS would require future customers to pay costs associated with providing service in the past. In the case of RRS, ComEd proposes that it not charge customers the full cost of service in 2007 and 2008, and that it be allowed to recover the remaining costs from customers during 2009 through 2012. That's retroactive ratemaking, pure and simple, and it results in a mismatch between customers, revenues, and expenses. It requires customers in 2009-2012 to pay costs that have nothing to do with serving them.



**Q. Can you illustrate the impact of ComEd's proposal on new customers and existing customers?**

A. Yes, I can. I have prepared AG Exhibit 1.9 to illustrate two important points. The exhibit starts with the rates in each year under Case 1, which includes 1% annual growth in the number of customers and the number of MWH sold. It then shows the same case, but changes the growth rate to zero (that is, no increase in the number of customers).

The first point from this exhibit is evident by comparing the rates with and without RRS. If a non-heating customer moves into ComEd's service territory in 2010, the current cost of serving that customer under Case 1 is 10.67 cents per KWH. But because of the deferral of purchased power costs in 2007 and 2008, the customer will be charged 11.35 cents per KWH. A typical non-heating customer in a single-family home uses approximately 10,150 KWH per year (ComEd response to CUB 1.01). That would result in an increased cost of approximately \$69 per year (increasing the cost from about \$1,083 to \$1,152 annually) – an increase of 6%.<sup>2</sup>

The difference for a new heating customer is equally severe. If a space-heating customer moves into ComEd's territory in 2010, the current cost of service under Case 1 is 9.96 cents per KWH. But under RRS, because of the deferrals in 2007 and 2008, the customer would be charged 10.60 cents per KWH. A typical space-heating customer in a single-family home uses approximately 23,200 KWH per year (ComEd response to CUB 1.01). That would result in an increased cost of approximately \$148 per year (increasing from \$2,311 to \$2,459), which is also an increase of more than 6%.

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<sup>2</sup> The annual cost is calculated by multiplying the cost per KWH by the number of KWH, then dividing by 100 to convert cents to dollars. So the cost without RRS is: (10.67 cents/KWH x 10,150 KWH) / 100 cents/\$ = \$1,083.01.

**Q. Who receives the benefit of these new customers paying for prior period costs?**

A. The benefit is received by ComEd's existing customers. This is also illustrated on the same exhibit. Now, instead of looking at the difference between Without RRS and With RRS, we need to look at the difference between Case 1 with 1% growth and Case 1 with 0% growth. The no growth case shows what the rates would be if there were no change in customers from 2007 through 2012 – that is, the same people who use the power in 2007 and 2008 pay all of the deferred costs in 2010 through 2012.

In 2010-2012, the exhibit shows that the cost should be 11.37 cents per KWH for a non-heating customer (under the Case 1 assumptions with no growth). But because new customers are being added – and those customers are each paying 6% more than the actual cost to serve them – the cost to existing customers goes down to 11.35 cents per KWH in 2010, and then keeps declining in 2011 and 2012 as more customers are added.

In other words, expenses are being shifted to the future, with the expectation that new customers will absorb some of them, thereby subsidizing existing customers. This is the classic definition of intergenerational inequity, and a blatant violation of the prohibition against retroactive ratemaking and the matching principle.

## **5. Conclusion**

**Q. What do you conclude?**

A. I conclude that ComEd's proposed RRS plan provides little if any benefit to residential non-heating customers and is a substantial detriment to residential heating customers. RRS also would unfairly shift costs between generations of customers. The primary

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373 beneficiary of RRS appears to be ComEd itself, which would stand to earn carrying  
374 charges between \$160 million and more than \$200 million depending on the scenario.

375 **Q. Does this conclude your direct testimony?**

376 **A.** Yes, it does.

## Appendix A

**Scott J. Rubin**

Attorney + Consultant

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### **Current Position**

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Public Utility Attorney and Consultant, Selinsgrove, PA. 1994 to present. I provide legal, consulting, and expert witness services to various organizations interested in the regulation of public utilities.

### **Previous Positions**

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Lecturer in Computer Science, Susquehanna University, Selinsgrove, PA. 1993 to 2000.

Senior Assistant Consumer Advocate, Office of Consumer Advocate, Harrisburg, PA. 1990 to 1994.  
I supervised the administrative and technical staff and shared with one other senior attorney the supervision of a legal staff of 14 attorneys.

Assistant Consumer Advocate, Office of Consumer Advocate, Harrisburg, PA. 1983 to 1990.

Associate, Laws and Staruch, Harrisburg, PA. 1981 to 1983.

Law Clerk, U.S. Environmental Protection Agency, Washington, DC. 1980 to 1981.

Research Assistant, Rockville Consulting Group, Washington, DC. 1979.

### **Current Professional Activities**

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Member, American Bar Association, Public Utility Law Section.

Member, American Water Works Association.

Admitted to practice law before the Supreme Court of Pennsylvania, the New York State Court of Appeals, the United States District Court for the Middle District of Pennsylvania, the United States Court of Appeals for the Third Circuit, and the Supreme Court of the United States.

### **Previous Professional Activities**

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Member, American Water Works Association, Rates and Charges Subcommittee, 1998-2001.

Member, Federal Advisory Committee on Disinfectants and Disinfection By-Products in Drinking Water, U.S. Environmental Protection Agency, Washington, DC. 1992 to 1994.

Chair, Water Committee, National Association of State Utility Consumer Advocates, Washington, DC. 1990 to 1994; member of committee from 1988 to 1990.

Member, Board of Directors, Pennsylvania Energy Development Authority, Harrisburg, PA. 1990 to 1994.

Member, Small Water Systems Advisory Committee, Pennsylvania Department of Environmental Resources, Harrisburg, PA. 1990 to 1992.

Member, Ad Hoc Committee on Emissions Control and Acid Rain Compliance, National Association of State Utility Consumer Advocates, 1991.

Member, Nitrogen Oxides Subcommittee of the Acid Rain Advisory Committee, U.S. Environmental Protection Agency, Washington DC. 1991.

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**Education**

J.D. with Honors, George Washington University, Washington, DC. 1981.

B.A. with Distinction in Political Science, Pennsylvania State University, University Park, PA. 1978.

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**Publications and Presentations**

“Quality of Service Issues,” a speech to the Pennsylvania Public Utility Commission Consumer Conference, State College, PA. 1988.

K.L. Pape and S.J. Rubin, “Current Developments in Water Utility Law,” in *Pennsylvania Public Utility Law* (Pennsylvania Bar Institute). 1990.

Presentation on Water Utility Holding Companies to the Annual Meeting of the National Association of State Utility Consumer Advocates, Orlando, FL. 1990.

“How the OCA Approaches Quality of Service Issues,” a speech to the Pennsylvania Chapter of the National Association of Water Companies. 1991.

Presentation on the Safe Drinking Water Act to the Mid-Year Meeting of the National Association of State Utility Consumer Advocates, Seattle, WA. 1991.

“A Consumer Advocate's View of Federal Pre-emption in Electric Utility Cases,” a speech to the Pennsylvania Public Utility Commission Electricity Conference. 1991.

Workshop on Safe Drinking Water Act Compliance Issues at the Mid-Year Meeting of the National Association of State Utility Consumer Advocates, Washington, DC. 1992.

Formal Discussant, Regional Acid Rain Workshop, U.S. Environmental Protection Agency and National Regulatory Research Institute, Charlotte, NC. 1992.

S.J. Rubin and S.P. O'Neal, “A Quantitative Assessment of the Viability of Small Water Systems in Pennsylvania,” *Proceedings of the Eighth NARUC Biennial Regulatory Information Conference*, National Regulatory Research Institute (Columbus, OH 1992), IV:79-97.

“The OCA's Concerns About Drinking Water,” a speech to the Pennsylvania Public Utility Commission Water Conference. 1992.

Member, Technical Horizons Panel, Annual Meeting of the National Association of Water Companies, Hilton Head, SC. 1992.

M.D. Klein and S.J. Rubin, “Water and Sewer -- Update on Clean Streams, Safe Drinking Water, Waste Disposal and Pennvest,” *Pennsylvania Public Utility Law Conference* (Pennsylvania Bar Institute). 1992.

Presentation on Small Water System Viability to the Technical Assistance Center for Small Water Companies, Pa. Department of Environmental Resources, Harrisburg, PA. 1993

“The Results Through a Public Service Commission Lens,” speaker and participant in panel discussion at Symposium: “Impact of EPA's Allowance Auction,” Washington, DC, sponsored by AER\*X. 1993.

“The Hottest Legislative Issue of Today -- Reauthorization of the Safe Drinking Water Act,” speaker and participant in panel discussion at the Annual Conference of the American Water Works Association, San Antonio, TX. 1993.

“Water Service in the Year 2000,” a speech to the Conference: “Utilities and Public Policy III: The Challenges of Change,” sponsored by the Pennsylvania Public Utility Commission and the Pennsylvania State University, University Park, PA. 1993.

“Government Regulation of the Drinking Water Supply: Is it Properly Focused?,” speaker and participant in panel discussion at the National Consumers League's Forum on Drinking Water Safety and Quality, Washington, DC. 1993. Reprinted in *Rural Water*, Vol. 15 No. 1 (Spring 1994), pages 13-16.

“Telephone Penetration Rates for Renters in Pennsylvania,” a study prepared for the Pennsylvania Office of Consumer Advocate. 1993.

“Zealous Advocacy, Ethical Limitations and Considerations,” participant in panel discussion at “Continuing Legal Education in Ethics for Pennsylvania Lawyers,” sponsored by the Office of General Counsel, Commonwealth of Pennsylvania, State College, PA. 1993.

“Serving the Customer,” participant in panel discussion at the Annual Conference of the National Association of Water Companies, Williamsburg, VA. 1993.

“A Simple, Inexpensive, Quantitative Method to Assess the Viability of Small Water Systems,” a speech to the Water Supply Symposium, New York Section of the American Water Works Association, Syracuse, NY. 1993.

S.J. Rubin, “Are Water Rates Becoming Unaffordable?,” *Journal American Water Works Association*, Vol. 86, No. 2 (February 1994), pages 79-86.

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*In the Matter of the Investigation on Motion of the Commission into the Adequacy of the Public Utility Water Service Provided by Tidewater Utilities, Inc., in Areas in Southern New Castle County, Delaware*, Delaware Public Service Commission, Docket No. 309-97. 1998. Concerning the standards for the provision of efficient, sufficient, and adequate water service, and the application of those standards to a water utility, on behalf of the Delaware Division of the Public Advocate.

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*In the Matter of Petition of Seaview Water Company for an Increase in Rates for Water Service*, New Jersey Board of Public Utilities, Docket No. WR98040193. 1999. Concerning the revenue requirements and rate design for a water utility, on behalf of the New Jersey Division of Ratepayer Advocate.

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*Chesapeake Ranch Water Co. v. Board of Commissioners of Calvert County*, U.S. District Court for Southern District of Maryland, Civil Action No. 8:03-cv-02527-AW. 2004. Submitted expert report concerning the expected level of rates under various options for serving new commercial development, on behalf of the plaintiff.

*Testimony concerning Lead in Drinking Water*, Committee on Government Reform, United States House of Representatives. 2004. Concerning the trade-offs faced by low-income households when drinking water costs increase, including an analysis of H.R. 4268.

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*Hope Gas, Inc. d/b/a Dominion Hope*, West Virginia Public Service Commission, Case No. 05-0304-G-42T. 2005. Concerning the utility's relationships with affiliated companies, including an appropriate level of revenues and expenses associated with services provided to and received from affiliates, on behalf of the West Virginia Consumer Advocate Division.

*Monongahela Power Co. and The Potomac Edison Co.*, West Virginia Public Service Commission, Case Nos. 05-0402-E-CN and 05-0750-E-PC. 2005. Concerning review of a plan to finance the construction of pollution control facilities and related issues, on behalf of the West Virginia Consumer Advocate Division.

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*Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, and Illinois Power Company d/b/a AmerenIP, proposed general increases in rates for delivery service*, Illinois Commerce Commission, Docket Nos. 06-0070, et al. 2006. Concerning rate design and cost of service, on behalf of the Illinois Office of Attorney General.

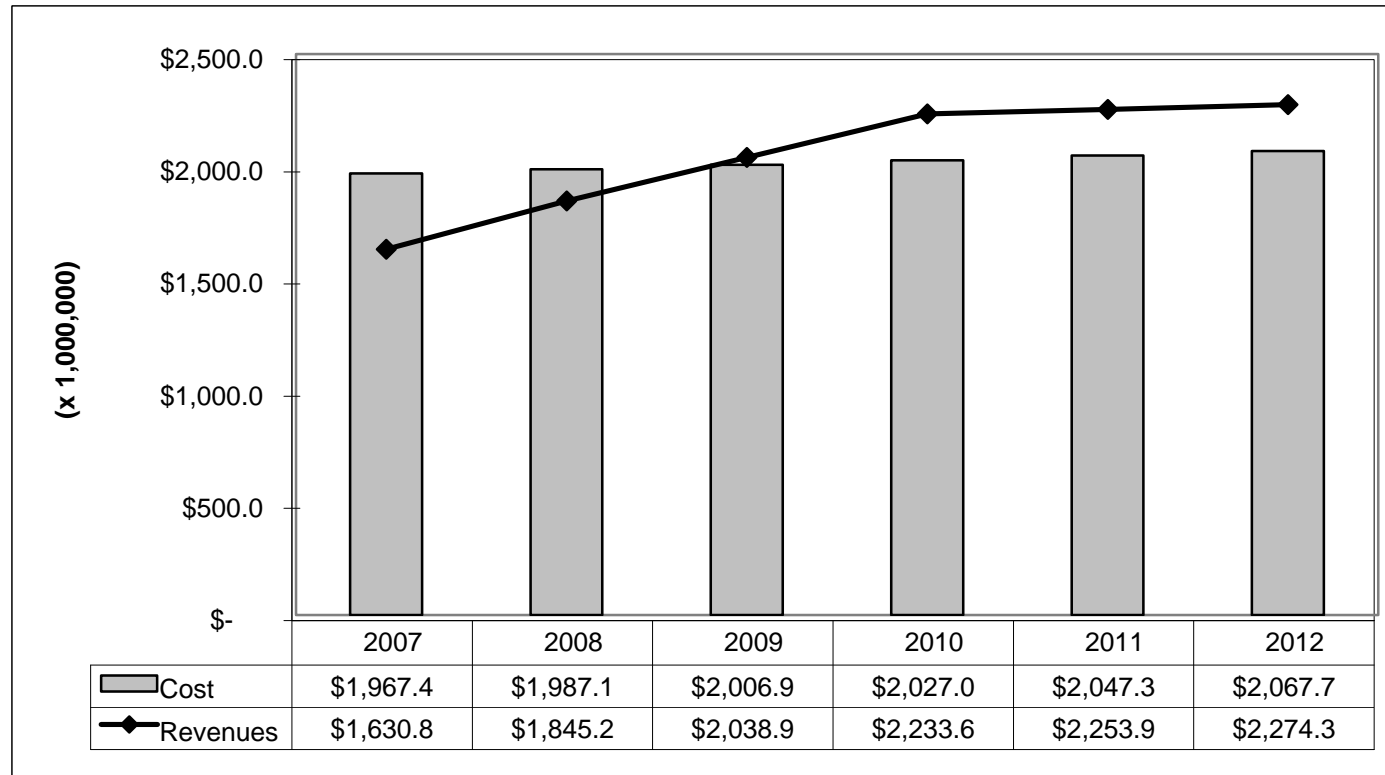
*Grens, et al., v. Illinois-American Water Co.*, Illinois Commerce Commission, Docket Nos. 5-0681, et al. 2006. Concerning utility billing, metering, meter reading, and customer service practices, on behalf of the Illinois Office of Attorney General and the Village of Homer Glen, Illinois.

Commonwealth Edison Company  
Residential Rate Stabilization Plan  
Docket No. 06-0411

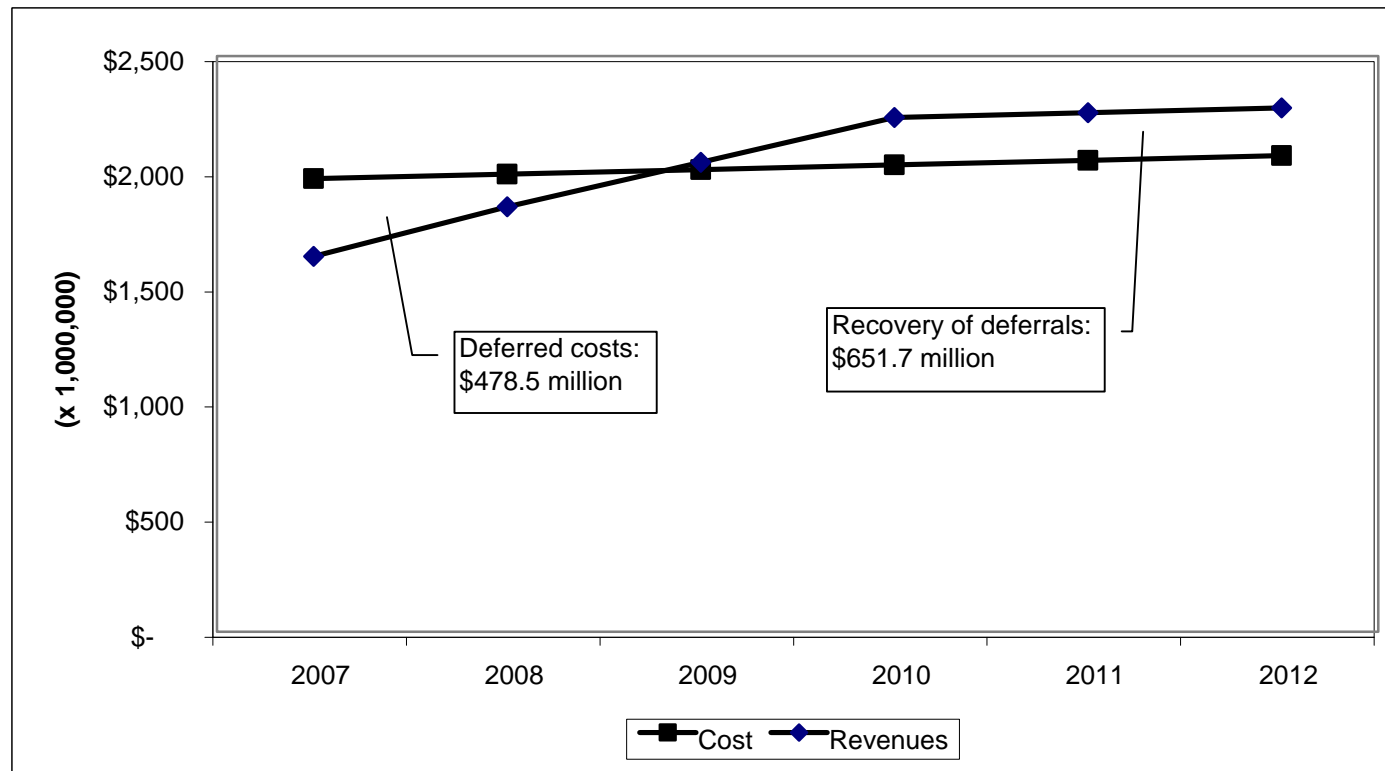
**Summary**

Range of wholesale power prices evaluated	\$60-\$80 per MWH
Carrying charge revenues to ComEd	\$160-\$209 million
2007-2010 rate increase (non-heating) without RRS	18.0% - 42.3%
2007-2010 rate increase (non-heating) with RRS	25.5% - 51.4%
2007-2010 rate increase (heating) without RRS	59.2% - 94.1%
2007-2010 rate increase (heating) with RRS	69.3% - 106.4%
Increased cost for new (non-heating) customer because of RRS	\$69 - \$83 per year
Increased cost for new (heating) customer because of RRS	\$148 - \$181 per year

**Impact of RRS on Residential Supply Revenues Collected  
Under Case 1 (\$60/MWH)**



**Deferrals Compared to Recovery of Deferrals  
Under Case 1 (\$60/MWH)**



Commonwealth Edison Company  
Residential Rate Stabilization Plan  
Docket No. 06-0411

**Description of Scenarios**

Assumptions common to all scenarios:

Weighted average cost of capital: 8.94%

Annual growth in number of residential customers: 1%

Annual growth in residential consumption: 1%

	<b>Wholesale Electricity Price</b>	<b>T&amp;D Rate Increase</b>
Case 1	\$60/MWH	None
Case 2	\$70/MWH	None
Case 3	\$80/MWH	None
Case 4	\$60/MWH escalating at 3% per year	None
Case 5	\$70/MWH escalating at 3% per year	None
Case 6	\$60/MWH	5% in 2010
Case 7	\$70/MWH	5% in 2010

**Impact of RRS on Costs, Revenues Collected, and Carrying Charges**

	Case 1 \$60/MWH	Case 2 \$70/MWH	Case 3 \$80/MWH	Case 4 \$60 / 3% Inflation	Case 5* \$70 / 3% Inflation
<b>2007</b>					
Supply Costs	1,967,381,698	2,295,428,064	2,623,295,130	1,967,381,698	2,295,428,064
Deferrals	336,619,955	371,638,103	406,830,081	336,619,955	371,638,103
% of Supply Cost Deferred	17.1%	16.2%	15.5%	17.1%	16.2%
<b>2008</b>					
Supply Costs	1,987,055,515	2,318,382,345	2,649,528,082	2,020,333,072	2,384,575,273
Deferrals	141,902,211	156,758,516	171,607,121	143,339,263	159,617,232
% of Supply Cost Deferred	7.1%	6.8%	6.5%	7.1%	6.7%
<b>2009</b>					
Supply Costs	2,006,926,070	2,341,566,168	2,676,023,362	2,107,391,261	2,475,275,884
Recovery of Deferrals	31,924,593	35,297,401	38,631,662	32,888,074	36,566,380
% Recover in Excess of Supply Costs	1.6%	1.5%	1.4%	1.6%	1.5%
<b>2010</b>					
Supply Costs	2,026,995,331	2,364,981,830	2,702,783,596	2,195,988,580	2,567,552,050
Recovery of Deferrals	206,589,905	228,102,214	249,707,199	206,843,426	228,851,419
% Recover in Excess of Supply Costs	10.2%	9.6%	9.2%	9.4%	8.9%
<b>2011</b>					
Supply Costs	2,047,265,284	2,388,631,648	2,729,811,432	2,286,147,107	2,661,612,791
Recovery of Deferrals	206,589,905	228,102,214	249,707,199	206,843,426	228,851,419
% of Supply Cost Deferred	10.1%	9.5%	9.1%	9.0%	8.6%
<b>2012</b>					
Supply Costs	2,067,737,937	2,412,517,964	2,757,109,546	2,378,077,651	2,757,109,546
Recovery of Deferrals	206,589,905	228,102,214	249,707,199	206,843,426	228,851,419
% of Supply Cost Deferred	10.0%	9.5%	9.1%	8.7%	8.3%
Total Deferrals 2007-2008	478,522,166	528,396,619	578,437,201	479,959,218	531,255,336
Recovery of Deferrals 2009-2012	651,694,307	719,604,042	787,753,260	653,418,351	723,120,638
Net Carrying Charge Recovery	173,172,141	191,207,423	209,316,059	173,459,133	191,865,302

\* Results for Case 5 understate supply costs in 2012 because model limits cost to \$80/MWH instead of \$81.15/MWH

**Impact on RRS of Reducing Carrying Charge to 8.20%**

	<u>Case 1 with 8.94% ROR</u>	<u>Case 1 with 8.20% ROR</u>
<b>2007</b>		
Supply Costs	1,967,381,698	1,967,381,698
Deferrals	336,619,955	336,619,955
% of Supply Cost Deferred	17.1%	17.1%
<b>2008</b>		
Supply Costs	1,987,055,515	1,987,055,515
Deferrals	141,902,211	141,902,211
% of Supply Cost Deferred	7.1%	7.1%
<b>2009</b>		
Supply Costs	2,006,926,070	2,006,926,070
Recovery of Deferrals	31,924,593	31,815,981
% Recover in Excess of Supply Costs	1.6%	1.6%
<b>2010</b>		
Supply Costs	2,026,995,331	2,026,995,331
Recovery of Deferrals	206,589,905	201,353,522
% Recover in Excess of Supply Costs	10.2%	9.9%
<b>2011</b>		
Supply Costs	2,047,265,284	2,047,265,284
Recovery of Deferrals	206,589,905	201,353,522
% of Supply Cost Deferred	10.1%	9.8%
<b>2012</b>		
Supply Costs	2,067,737,937	2,067,737,937
Recovery of Deferrals	206,589,905	201,353,522
% of Supply Cost Deferred	10.0%	9.7%
Total Deferrals 2007-2008	478,522,166	478,522,166
Recovery of Deferrals 2009-2012	651,694,307	635,876,548
Net Carrying Charge Recovery	173,172,141	157,354,381



**Impact of RRS on Residential Rates (average cents per KWH)**

**Table 1: Non-Space Heating Customers**

	Case 1 \$60/MWH	Case 2 \$70/MWH	Case 3 \$80/MWH	Case 4 \$60 / 3% Inflation	Case 5* \$70 / 3% Inflation	Case 6 \$60 / 5% T&D	Case 7 \$70 / 5% T&D
<b>Without RRS Plan</b>							
2006	9.04	9.04	9.04	9.04	9.04	9.04	9.04
2007	10.84	11.93	13.02	10.84	11.93	10.84	11.93
2008	10.79	11.87	12.96	10.91	12.11	10.79	11.87
2009	10.70	11.78	12.87	11.05	12.24	10.70	11.78
2010	10.67	11.77	12.87	11.22	12.43	10.87	11.97
2011	10.67	11.77	12.87	11.44	12.65	10.87	11.97
2012	10.67	11.77	12.87	11.66	12.87	10.87	11.97
<b>Percent Increase Without RRS</b>							
2007	19.9%	31.9%	44.0%	19.9%	31.9%	19.9%	31.9%
2008	-0.5%	-0.5%	-0.5%	0.6%	1.5%	-0.5%	-0.5%
2009	-0.8%	-0.8%	-0.6%	1.3%	1.1%	-0.8%	-0.8%
2010	-0.3%	0.0%	0.0%	1.5%	1.6%	1.6%	1.6%
Combined 4-year increase	18.0%	30.2%	42.3%	24.1%	37.5%	20.2%	32.4%
<b>With RRS Plan</b>							
2006	9.04	9.04	9.04	9.04	9.04	9.04	9.04
2007	9.68	10.65	11.63	9.68	10.65	9.68	10.65
2008	10.31	11.34	12.38	10.42	11.57	10.31	11.34
2009	10.80	11.89	13.00	11.16	12.36	10.80	11.89
2010	11.35	12.52	13.69	11.90	13.18	11.55	12.72
2011	11.34	12.51	13.68	12.11	13.40	11.54	12.71
2012	11.33	12.51	13.68	12.33	13.61	11.53	12.70
<b>Percent Increase With RRS</b>							
2007	7.1%	17.8%	28.5%	7.1%	17.8%	7.1%	17.8%
2008	6.4%	6.5%	6.5%	7.6%	8.6%	6.4%	6.5%
2009	4.8%	4.8%	5.0%	7.1%	6.9%	4.8%	4.8%
2010	5.1%	5.3%	5.4%	6.7%	6.7%	6.9%	7.0%
Combined 4-year increase	25.5%	38.4%	51.4%	31.6%	45.8%	27.7%	40.6%

\* Results for Case 5 understate supply costs in 2012 because model limits cost to \$80/MWH instead of \$81.15/MWH

**Impact of RRS on Residential Rates (average cents per KWH)**

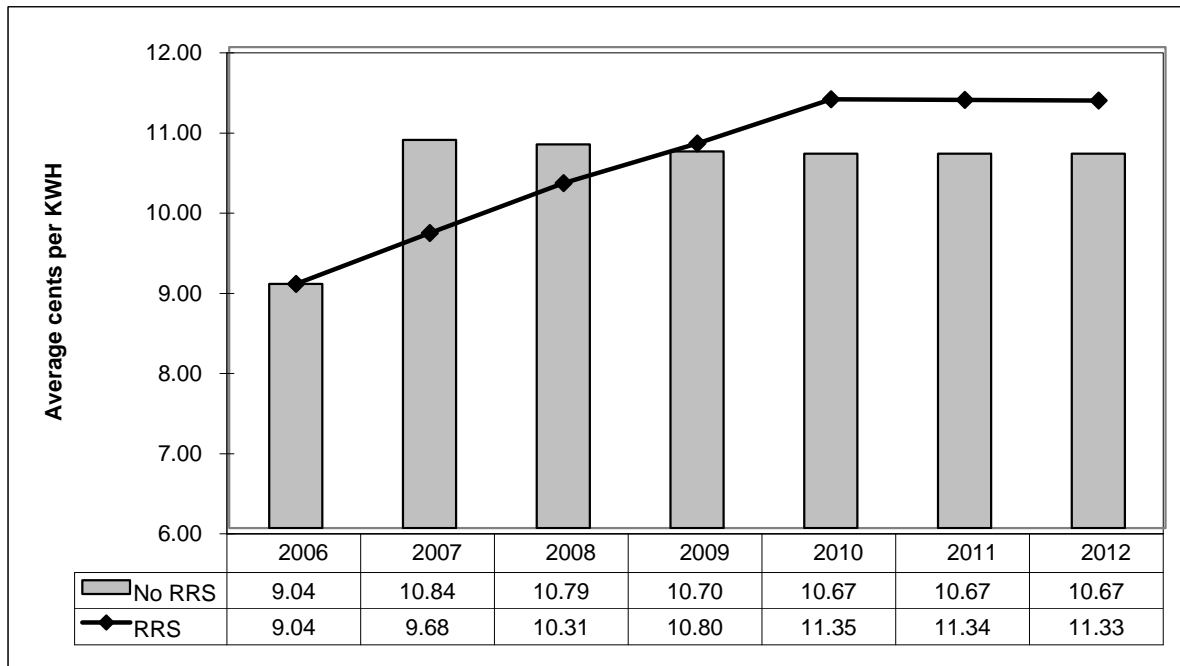
**Table 2 : Space Heating Customers**

	Case 1 \$60/MWH	Case 2 \$70/MWH	Case 3 \$80/MWH	Case 4 \$60 / 3% Inflation	Case 5* \$70 / 3% Inflation	Case 6 \$60 / 5% T&D	Case 7 \$70 / 5% T&D
<b>Without RRS Plan</b>							
2006	6.26	6.26	6.26	6.26	6.26	6.26	6.26
2007	7.70	8.91	10.12	7.70	8.91	7.70	8.91
2008	8.25	9.55	10.84	8.25	9.55	8.25	9.55
2009	9.46	10.95	12.14	9.46	10.95	9.46	10.95
2010	9.96	11.05	12.14	10.51	11.71	10.13	11.22
2011	9.96	11.05	12.14	10.73	11.93	10.13	11.22
2012	9.96	11.05	12.14	10.95	12.14	10.13	11.22
<b>Percent Increase Without RRS</b>							
2007	23.1%	42.4%	61.8%	23.1%	42.4%	23.1%	42.4%
2008	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
2009	14.6%	14.6%	12.0%	14.6%	14.6%	14.6%	14.6%
2010	5.3%	1.0%	0.0%	11.1%	6.9%	7.1%	2.5%
Combined 4-year increase	59.2%	76.7%	94.1%	67.9%	87.1%	61.9%	79.4%
<b>With RRS Plan</b>							
2006	6.26	6.26	6.26	6.26	6.26	6.26	6.26
2007	6.88	7.96	9.04	6.88	7.96	6.88	7.96
2008	7.89	9.12	10.36	7.89	9.12	7.89	9.12
2009	9.55	11.05	12.26	9.55	11.05	9.55	11.05
2010	10.60	11.76	12.92	11.14	12.41	10.76	11.92
2011	10.59	11.75	12.91	11.36	12.63	10.76	11.92
2012	10.58	11.74	12.90	11.57	12.84	10.75	11.91
<b>Percent Increase With RRS</b>							
2007	9.9%	27.2%	44.4%	9.9%	27.2%	9.9%	27.2%
2008	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%
2009	21.1%	21.1%	18.3%	21.1%	21.1%	21.1%	21.1%
2010	10.9%	6.4%	5.4%	16.7%	12.3%	12.7%	7.9%
Combined 4-year increase	69.3%	87.9%	106.4%	78.1%	98.4%	72.0%	90.6%

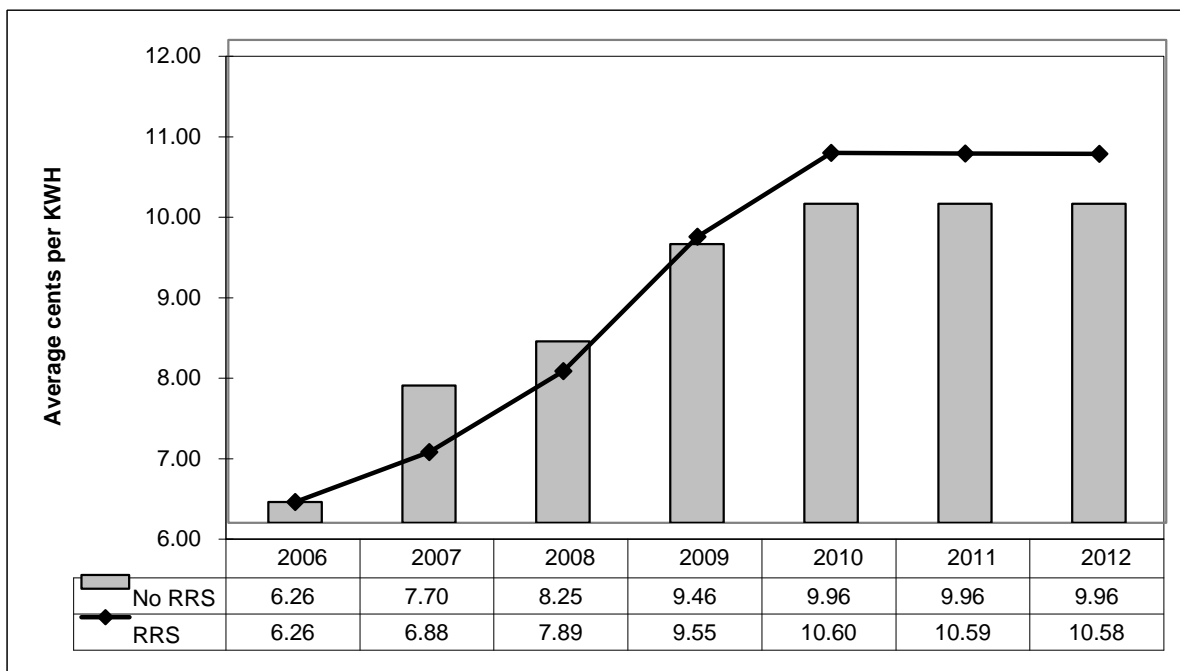
\* Results for Case 5 understate supply costs in 2012 because model limits cost to \$80/MWH instead of \$81.15/MWH

**Impact of RRS on Residential Rates (average cents per KWH)  
Under Case 1 (\$60/MWH)**

**Chart 1: Non-Space Heating Customers**



**Chart 2: Space Heating Customers**



**Impact of Recovery of Deferrals on New Customers**

	Non-Heating Customers		Heating Customers	
	Case 1 with 1% Growth	Case 1 with 0% Growth	Case 1 with 1% Growth	Case 1 with 0% Growth
<b>Without RRS Plan</b>				
2006	9.04	9.04	6.26	6.26
2007	10.84	10.84	7.70	7.70
2008	10.79	10.79	8.25	8.25
2009	10.70	10.70	9.46	9.46
2010	<b>10.67</b>	<b>10.67</b>	<b>9.96</b>	<b>9.96</b>
2011	<b>10.67</b>	<b>10.67</b>	<b>9.96</b>	<b>9.96</b>
2012	<b>10.67</b>	<b>10.67</b>	<b>9.96</b>	<b>9.96</b>

**Percent Increase Without RRS**

2007	19.9%	19.9%	23.1%	23.1%
2008	-0.5%	-0.5%	7.1%	7.1%
2009	-0.8%	-0.8%	14.6%	14.6%
2010	-0.3%	-0.3%	5.3%	5.3%
Combined 4-year increase	18.0%	18.0%	59.2%	59.2%

**With RRS Plan**

2006	9.04	9.04	6.26	6.26
2007	9.68	9.68	6.88	6.88
2008	10.31	10.31	7.89	7.89
2009	10.80	10.80	9.55	9.55
2010	<b>11.35</b>	<b>11.37</b>	<b>10.60</b>	<b>10.61</b>
2011	<b>11.34</b>	<b>11.37</b>	<b>10.59</b>	<b>10.61</b>
2012	<b>11.33</b>	<b>11.37</b>	<b>10.58</b>	<b>10.61</b>

**Percent Increase With RRS**

2007	7.1%	7.1%	9.9%	9.9%
2008	6.4%	6.4%	14.6%	14.6%
2009	4.8%	4.8%	21.1%	21.1%
2010	5.1%	5.2%	10.9%	11.1%
Combined 4-year increase	25.5%	25.7%	69.3%	69.6%